

Docket No.: 271889US20

OBLON
SPIVAK
MCCLELLAND
MAIER
-&NEUSTADT
P.C.

ATTORNEYS AT LAW

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 10/044,316

Applicants: Marc R. HOUYOUX, et al.

Filing Date: January 11, 2002

For: USER-EXECUTABLE METHOD FOR COMPLEX

MODEL DATA ANALYSIS AND ASSOCIATED

SYSTEM, ...

Group Art Unit: 2122

Examiner: NOT ASSIGNED

SIR:

Attached hereto for filing are the following papers:

### GENERAL POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE CHANGE OF CORRESPONDENCE ADDRESS APPLICATION STATEMENT UNDER 37 CFR 3.73(b) ASSIGNMENTS (COPIES)

Our credit card payment form in the amount of \$0.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters

Registration No. 28,870

Customer Number

22850

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Ronald A. Rudder, Ph.D. Registration No. 45,618

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est Available Col



### GENERAL POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE

I hereby appoint:	
☐ Practitioners associated with the Customer Number	22850
as attorney(s) or agent(s) to represent the undersigned before the connection with any and all patent applications assigned only to the records or assignment documents attached to this form in according	the undersigned according to the USPTO assignment
Assignee Name and Address:	
Research Triangle Institute 3040 Comwallis Road Research Triangle Park, NC 27709	
A statement under 37 CFR 3.73(b) is attached.	
010117 17 07 10010	
The individual whose signature and title is supplied be	elow is authorized to act on behalf of the assignee
The individual whose signature and title is supplied be	elow is authorized to act on behalf of the assignee

OBLON, SPIVAK McCLELLAND, MAIER & NEUSTADT, P.C. [10/2004]



AUG 3 1 2005

Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Application Number	10/044,316	
Filing Date	January 11, 2002	
First Named Inventor	Marc R. HOUYOUX, et al.	
Art Unit	2122	
Examiner Name	NOT ASSIGNED	
Attorney Docket Number	271889US20	

Please change the Correspondence Address for the above-identified patent application to:												
I am the:												
Applicant/Inventor.												
Assignee of record of the entire interest. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)												
Attorney or agent or record. Registration Number 45,	618											
Registered practitioner named in the application transness. Executed oath or declaration. See 37 CFR 1.33(a)(1).												
Signature Royald C. Rudde												
Typed or Printed Name Ronald A. Rudder, Ph.D.												
Date 8/30/05	Telephone 703-412-7033											
NOTE: Signatures of all the inventors or assignees of record of the entire interest forms if more than one signature is required, see below*.	or their representative(s) are required. Submit multiple											
★ Total of 1 forms are submitted.												

I:\ATTY\RAR\POWER OF ATTORNEYS\271889USADDRESS.DOC

AUG 3 1 2005 E

PRADEMART STATEMENT UNDER	37 CFR 3.73(b)
Applicant/Patent Owner: Marc R. HOUYOUX, et al.	
Application No./Patent No.: 10/044,316  USER-EXECUTABLE METHOD FOR COMPLEX No.: COMPUTER DEVICE, AND COMPUTER SOFTWA	Filed/Issue Date: January 11, 2002  IODEL DATA ANALYSIS AND ASSOCIATED SYSTEM, RE PROGRAM PRODUCT
	poration pe of Assignee, e.g., corporation, partnership, government agency, etc.)
States that it is:	
1.   the assignee of the entire right, title, and interest; or	
2. an assignee of less than the entire right, title and interest in the extent (by, percentage) of its ownership interest is in the patent application/patent identified above by virtue of an application/patent identified above. A copy of the assignment is	ssignment from the inventor(s) of the patent
The undersigned (whose title is supplied below) is authorized to	act on behalf of the assignee.
Panda Co Rugal	8-30-65
Signature	Date
Ronald A. Rudder, Ph.D.	703-412-7033
Printed or Typed Name	Telephone Number
45,618	
Registration Number	

I:\ATTY\RAR\POWER OF ATTORNEYS\271889USSTATEMENT.DOC

### COPY ONLY NOT FOR RECORDATION

### ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

### MCNC 3021 Cornwallis Road Research Triangle Park, North Carolina 27709

its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in "USER-EXECUTABLE METHOD FOR COMPLEX MODEL DATA ANALYSIS AND ASSOCIATED SYSTEM, COMPUTER DEVICE, AND COMPUTER SOFTWARE PROGRAM PRODUCT,"

as set forth in this United States Patent Application

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	executed concurrently herewith	
	executed on	
$\boxtimes$	Application No. 10/044,316; filed January 11, 2002	
	Application claims priority from Application No. , filed	, all applications listed
	above being hereinafter referred to as the "application(s)";	**

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation, nonprovisionals, continuation-in-parts, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues, reexaminations, and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all

facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions, and to testify in any proceedings relating to said inventions, patent applications, and/or Letters Patent.

•

The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

3/21/02 Man R. Hormon
Date    Marc R. Houyoux   Marc
State of North Caroling
County of Wake
I, <u>Saman Wa Mitchell</u> , a Notary Public for said County and State, do hereby certify that Marc R. Houyoux personally appeared before me this day and acknowledged the due execution of the foregoing instrument.
Witness my hand and official seal, this the $215^{+}$ day of $March$ , 2002.
(Official Seal)  Savantha Mitalle
My commission expires 1205-05 Notary Public
3-22-2002 South Kin
Date Sousan Karimi
State of North Carolina
County of Wake
I, <u>Omanha</u> <u>Witchell</u> , a Notary Public for said County and State, do hereby certify that Sousan Karimi personally appeared before me this day and acknowledged the due execution of the foregoing instrument.
Witness my hand and official seal, this the $22^{nd}$ day of $Ma/ch$ , 2002.
(Official Seal)  Sawaida Hildell
Notary Public

3/22/02 Novem M. Ituri  Date  Karen M. Litwin
State of North Cambina
County of Wake
I, <u>Ananha Mitchell</u> , a Notary Public for said County and State, do hereby certify that Karen M. Litwin personally appeared before me this day and acknowledged the du execution of the foregoing instrument.
Witness my hand and official seal, this the 22nd day of Maich, 2002.
(Official Seal)  - Surantha Mitchell
My commission expires 12-05-05  Notary Public

Attorney Docket No. 30540/240840 RTA 2113433v1

### COPY ONLY NOT FOR RECORDATION

### BILL OF SALE AND ASSIGNMENT

THIS BILL OF SALE AND ASSIGNMENT (this "Bill of Sale") is made effective as of January 1, 2003, by MCNC, a North Carolina nonprofit corporation (the "Assignor"), to MCNC Research and Development Institute, a North Carolina nonprofit corporation (the "Assignee").

The Assignee and the Assignor are parties to a Restructuring Agreement, dated as of January 1, 2003 (the "Agreement"), pursuant to which the Assignor has agreed to assign, transfer and convey to the Assignee, and the Assignee has agreed to acquire from the Assignor, the Transferred Assets (as defined below). This Bill of Sale is entered into pursuant to Section 5.2(b)(i) of the Agreement. Capitalized terms used but not defined herein will have the meanings for such terms that are set forth in the Agreement.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor hereby assigns, transfers and conveys to the Assignee, subject to the terms and conditions set forth in the Agreement and effective as of 12:01 a.m. (Durham, North Carolina time) on the effective date hereof, all of the Assignor's right, title and interest in and to all of the operations and assets of the Assignor, tangible or intangible, relating to the EDG Divisions and all of the operations and assets of the Assignor, tangible or intangible, relating to the Corporate/Administrative Divisions (all of the foregoing, collectively, the "Transferred Assets"), including the following assets of the Assignor, in each case to the extent (and only to the extent) relating to the EDG Divisions and/or the Corporate/Administrative Divisions:

- (a) All machinery, equipment, parts, tools, fixtures, furniture, office equipment, computer hardware, supplies, motor vehicles and other items of tangible personal property, including all of the foregoing listed on <u>Schedule 3.1(a)</u> to the Agreement;
- (b) All trade and other accounts and/or notes receivable, including the benefit of all collateral, security, guaranties and similar undertakings received or held in connection therewith and any claim, remedy or other right related thereto, including all of the foregoing listed on <a href="Schedule 3.1(b)">Schedule 3.1(b)</a> to the Agreement;
- (c) All inventories wherever located, including raw materials, goods consigned to vendors or subcontractors, works in process, finished goods, spare parts, goods in transit, products under research and development, demonstration equipment and inventory on consignment, including all of the foregoing listed on <a href="Schedule 3.1(c)">Schedule 3.1(c)</a> to the Agreement;
- (d) All real property, buildings, structures and other improvements thereon (including all easements, rights-of-way, water rights, tenements, hereditaments, appurtenances, fixtures and other real property rights pertaining thereto);
- (e) All leases and subleases of real property, together with any options to purchase the underlying property and leasehold improvements thereon, and in each case all other rights, subleases, licenses, permits, deposits and profits appurtenant to or related to such leases and subleases;

- (f) All rights and interests in and to any Contracts, including any rights under equipment or other product warranties from third party vendors or manufacturers, including all of the foregoing listed on Schedule 3.1(f) to the Agreement;
- (g) All Intellectual Property, including all of the foregoing listed on <u>Schedule 3.1 (g)</u> to the Agreement;
- (h) All business, employee and financial records, books, ledgers, files, correspondence, documents, lists, studies and reports, including customer lists, supplier lists and equipment repair, maintenance, service, personnel, payroll, employee benefit, quality control and insurance records, whether written, electronically stored or otherwise recorded;
- (i) All goodwill and all sales, advertising, promotional and marketing information and materials;
- (j) All Permits, including all of the foregoing listed on Schedule 3.1(j) to the Agreement;
- (k) Subject to the terms of Section 6.3 of the Agreement, all rights of the Assignor to causes of action, lawsuits, judgments, claims and demands of any nature and all counterclaims, rights of setoff, rights of indemnification and affirmative defenses to any claims that may be brought against the Assignee by third parties;
- (l) All rights to refunds from customers and suppliers, all prepaid expenses and deposits and all rights to condemnation proceeds; and
- (m) All other properties and assets to the extent the Assignor has any rights thereto or interests therein, whether a present or future interest, an inchoate right or otherwise and whether such properties or assets are tangible or intangible and whether or not of a type falling within any of the categories of assets or properties described above.

Notwithstanding any provision of this Bill of Sale, the Assignor will retain ownership of the Excluded Assets. "Excluded Assets" means all of the operations and assets of the Assignor, other than the Transferred Assets, including all of the operations and assets of the Assignor, tangible or intangible, relating to the Retained Divisions and including all of the following assets of the Assignor:

- (n) All cash and cash equivalents.
- (o) Corporate organizational documents, stock books, stock ledgers, minute books and tax returns.
- (p) The corporate name "MCNC" and any and all registered or unregistered trademarks, service marks and logos relating to or incorporating such name.
- (q) The main external MCNC telephone and fax numbers and the MCNC website (other than the content of any MCNC websites relating to the EDG Divisions and/or the Corporate/Administrative Divisions).

- (r) All rights to causes of action, lawsuits, judgments, claims and demands of any nature and all counterclaims, rights of setoff, rights of indemnification and affirmative defenses to any claims that may be brought against the Assignor by third parties, in each case to the extent (and only to the extent) that they relate to the Excluded Assets or Excluded Liabilities.
  - (s) All rights under any Transaction Document.
- (t) The lease agreement between the Assignor and TUCASI dated as of April 26, 1982 and those assets, if any, listed on <u>Schedule 3.3(g)</u> to the Agreement.

The Assignor agrees to furnish upon request to the Assignee such further information, to execute and deliver to the Assignee such other documents, and to do such other acts and things (including the execution and delivery of such further instruments or documents as may be necessary or convenient to transfer and convey any Transferred Asset to the Assignee), all as the Assignee may reasonably request for the purpose of carrying out the intent of this Bill of Sale.

BY ITS ACCEPTANCE OF THIS BILL OF SALE, THE ASSIGNEE ACKNOWLEDGES AND AGREES THAT THE ASSIGNOR HAS NOT MADE ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE CONDITION OR MERCHANTABILITY OF THE TRANSFERRED ASSETS OR THE FITNESS OF THE TRANSFERRED ASSETS FOR ANY PARTICULAR PURPOSE, IT BEING THE INTENTION AND AGREEMENT OF THE ASSIGNOR AND THE ASSIGNEE THAT THE TRANSFERRED ASSETS ARE BEING ACQUIRED BY THE ASSIGNEE ON AN "AS IS, WHERE IS WITH ALL FAULTS" BASIS IN THEIR PRESENT CONDITION AND THAT ANY WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY AND WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE ARE HEREBY EXPRESSLY DISCLAIMED AND THAT THE ASSIGNEE WILL, AND DOES HEREBY, SUBJECT TO (AND WITHOUT AFFECTING) THE TERMS OF SECTION 6.2 AND ARTICLE VII OF THE AGREEMENT, RELEASE THE ASSIGNOR FROM ANY CLAIM (WHETHER STATUTORY, COMMON LAW OR OTHERWISE) RELATING TO THE CONDITION, MAINTENANCE, OPERATION, PROFITABILITY, MARKETABILITY OR LEGAL COMPLIANCE OF ANY OF THE TRANSFERRED ASSETS; PROVIDED, HOWEVER, THAT THE FOREGOING WILL APPLY BETWEEN THE ASSIGNOR AND THE ASSIGNEE ONLY AND WILL NOT LIMIT ANY RIGHTS UNDER WARRANTIES AND GUARANTIES OF THIRD PARTIES IN RESPECT TO THE TRANSFERRED ASSETS.

This Bill of Sale will be governed by the laws of the State of North Carolina without giving effect to any choice or conflict of law principles of any jurisdiction. This Bill of Sale will be binding upon and inure to the benefit of the Assignor and the Assignee and their respective successors and assigns. This Bill of Sale may be executed in one or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same agreement.

[The next page is the signature page]

### [Signature Page to Bill of Sale and Assignment]

The Assignor has executed and delivered this Bill of Sale effective as of the date first above written.

**MCNC** 

By:

David P. Rizzo, President

ACCEPTED AND AGREED TO:

MCNC RESEARCH AND DEVELOPMENT INSTITUTE

By: // Molian M. Moore, Jr., Chairman

### Schedule 3.1(g)

Intellectual Property

See attached

## MCNC INTELLECTUAL PROPERTY Schedule 3.1(g)

A. Patents and Pending Applications Assigned to MCNC as Sole Owner.

(Including Expired Patents (those reaching their full term (i.e. 17 years) or where maintenance fees were not paid).

Shitts/Motes	Expired: 23-Mar-94** (Not on KCLH List)	Expired: 26-May-99**	Expired: 19-Apr-00**	Expired: 16-Aug-00**	Expired: 02-Oct-96** (Not on KCLH List)	Expired: 28-Mar-93**	Expired: 11-Apr-93** (Not on KCLH List)	Expired: 02-May-93** (Not on KCLH List)	Expired: 23-Jan-94** (Not on KCLH List)	Expires: 15-Mar-09	Expired: 21-Aug-98** (Not on KCLH List)
. Aksilpnee	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC
Desimilarion	18-Mar-86 Method and Apparatus for Exposing Photoresist	26-May-87 Method of Interconnecting Wiring Planes	19-Apr-88 Shared Current Loop, Multiple Field Apparatus and Process for Plasma Processing	16-Aug-88 Microelectronics Apparatus	27-Sep-88 Apparatus for Mounting a Semiconductor Chip and Making Electrical Connections Thereto	Structure and Method for Isolated Voltage Referenced Transmission Lines	Method and Apparatus for Processing Multi-Dimensional Data to Obtain a Fourier Transform	02-May-89 Method for Anisotropically Hardening a Protective Coating for Integrated Circuit Manufacture	23-Jan-90 Circuit to Perform Variable Threshold Logic	01-May-90   Fluxless Soldering Process	21-Aug-90 Method of Building Solder Bumps
Tissue Togra	18-Mar-86	26-May-87	19-Apr∺88	16-Aug-88	27-Sep-88	28-Mar-89	11-Apr-89	02-May-89	23-Jan-90	01-May-90	21-Aug-90
Ausnatence Itssuelbare	4,576,884	4,667,404	4,738,761	4,764,644	4,774,630	4,816,616	4,821,224	4,826,754	4,896,059	4,921,157	4,950,623

Sztrus/Notester	Expired: 22-Mar-95** (Not on KCLH List)	Expired: 22-Mar-95** (Not on KCLH List)	Expired: 06-Aug-99**	Expired: 16-Aug-95** (Not on KCLH List)	Expired: 06-Sep-95** (Not on KCLH List)	Expired: 27-Aug-95** (Not on KCLH List)	Expired: 12-Nov-99**	Expires: 23-May-09	Expired: 23-Jun-00**	Expired: 11-Sep-96** (Not on KCLH List)	Expired: 18-Aug-96** (Not on KCLH List)	Expired: 12-Jan-01**
With a second	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC	MCNC
adsapitent i ksifeidate – ai – ai – ai – aseindon	Self-Aligned Salicide Process for Forming Semiconductor Devices and Devices Formed Thereby	Electrostatic Handling Device for a Wafer	Method for Selectively Depositing Single Elemental Semiconductor Material on Substrates, Reacting Vapor Phase Reducible Compound With Reducing Agent	Maximum Arcal Density Recessed Oxide Isolation (MADROX) Process, Low Temperature	Magnetron Method and Apparatus for Producing High Density Ionic Gas Discharge; Remote Plasma Source, Transportation of Plasma to Reaction Chamber, Semiconductor Treatment	Passivated Polycrystaline Semiconductors Quantum Well/Superlattice Structures Fabricated Thereof; Multilayer Barriers for Passivated Semiconductors of Silicon Dioxide, Phosphorous, Phosphorous Oxide and Silicon Germanium Oxide	Method for Anisotropically Hardening a Protective Coating for Integrated Circuit Manufacture; With Well-Defined Edges, Photoresists	Bonding of Ceramic Parts	12-May-92 Method for Selectively Depositing Material on Substrates 23-Jun-92 Socket for Turning Fastener Heads Having Deformed Head Surfaces	Method and Apparatus for Reducing Particulate Contamination in Processing Chambers	Apparatus and Method for Controlling Processing Uniormity in a Magnetron; for Uniform Rate Plasma Processing of Semiconductor Substrates	Electroluminescent Display With Space Charge Removal
issileTbite	19-Mar-91	19-Mar-91	06-Aug-91	13-Aug-91	03-Sep-91	24-Sep-91	12-Nov-91	24-Mar-92	12-May-92 23-Jun-92	08-Sep-92	15-Sep-92	12-Jan-93
TUSTParent	5,001,082	5,001,594	5,037,775	5,039,625	5,045,166	5,051,786	5,064,748	5,098,494	5,112,439	5,145,303	5,147,520	5,179,316

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OSPatent	Issueibatt	${\mathfrak M}$ នៃក្រុកខែក្រុក ្រុកខ្លាំខ្លែន ${\mathbb R}^2$ ា ${\mathbb R}^2$ ា ្រិន្តជាប្រែហា ${\mathbb R}^2 = {\mathbb R}^2$	्रदेशीय्तास्	Status Notes
5,201,995	13-Apr-93	Alternating Cyclic Pressure Modulation Process for Selective Area Deposition; Creating a Vapor Phase Chemical Equilibrium System Capable of Deposition and Etching the Material Deposited	MCNC	Expired: 13-Apr-01**
5,206,557	27-Apr-93	Microelectromechanical Transducer and Fabrication Method	MCNC	Expires: 27-Nov-10
5,237,434	i	Microelectronic Module Having Optical and Electrical	MCNC	Expires: 05-Nov-11
5,290,400	01-Mar-94	Fabrication Method for Microelectromechanical Transducer	MCNC	Expires: 01-Mar-11
5,407,121	18-Apr-95	Fluxless Soldering of Copper	MCNC	Expires: 19-Nov-13
5,412,537	02-May-95	02-May-95 Electrical Connector Including Variably Spaced Connector	MCNC	To Expire Per Client
		Contacts		Instructions 16-Aug-02
5,434,464	18-Jul-95	18-Jul-95 Unidirectional Supporting Structure for Microelectromechanical Transducers	MCNC	Expires: 23-May-14
5,459,013	17-Oct-95	Image Reversal Method for Repairing Defective Areas on Microelectronic Substrates	MCNC	Expired: 17-Oct-99**
5,499,754	19-Mar-96	Fluxless Soldering Sample Pretreating System	MCNC	Expires: 19-Nov-13
5,536,959	16-Jul-96	Self-Aligned Charge Screen (SACS) Field Effect Transistors and Methods	MCNC	Expired: 16-Jul-00**
5,615,825	01-Apr-97	Fluorinated Fluxless Soldering	MCNC	Expires: 12-May-15
5,740,258	14-Apr-98	Active Noise Supressors and Methods for use in the Ear Canal	MCNC	Expires: 05-Jun-15
5,990,472	23-Nov-99	Microelectronic Radiation Detectors for Detecting and Emitting Radiation Signals	MCNC	Expires: 29-Sep-17
5,992,729	30-Nov-99	Tacking Processes and Systems for Soldering	MCNC	Expires: 02-Oct-16
6,013,381	11-Jan-00	Fluorinated Fluxless Soldering	MCNC	Expires: 12-May-15
6,025,767	15-Feb-00	Encapsulated Micro-Relay Modules and Methods of Fabricating Same	MCNC	Expires: 05-Aug-16
6,057,520	02-May-00	02-May-00 Arc Resistant High Voltage Micromachined Electrostatic Switch	MCNC	Expires: 30-Jun-19
6,137,623	24-Oct-00	Modulatable Reflectors and Methods for Using Same	MCNC	Expires: 17-Mar-18

	<ul> <li>24-Mar-02 Solder Bump Fabrication Methods and Structures Including a Titanium Barrier Layer</li> <li>24-Oct-00 High Voltage Micromachined Electrostatic Switch</li> <li>15-May-01 Methods for Modulating a Radiation Signal</li> <li>22-May-01 Micromachined Electrostatic Actuator with Air Gap</li> <li>28-May-02 Electrostatically Actuated Electromagnetic Radiation Shutter</li> </ul>	MCNC MCNC MCNC MCNC	Expires: 20-Mar-15 Expires: 30-Jun-19 Expires: 16-Apr-02 Expires: 27-May-19 Expires: 23-Nov-19
	Voltage Micromachined Electrostatic Switch ods for Modulating a Radiation Signal omachined Electrostatic Actuator with Air Gap	MCNC MCNC MCNC MCNC	Expires: 30-Jun-19 Expires: 16-Apr-02 Expires: 27-May-19 Expires: 23-Nov-19
	ods for Modulating a Radiation Signal omachined Electrostatic Actuator with Air Gap	MCNC	Expires: 16-Apr-02 Expires: 27-May-19 Expires: 23-Nov-19
	omachined Electrostatic Actuator with Air Gap	MCNC	Expires: 27-May-19 Expires: 23-Nov-19
	rostatically Actuated Electromagnetic Radiation Shutter	MCNC	Expires: 23-Nov-19
	The second secon		
	21-May-02   Close-Loop Cold Cathode Current Regulator	MCNC	Expires: 15-Dec-19
	23-Apr-02 Hybrid Microelectromechanical System Tunable Capacitor and	MCNC	Expires: 23-Oct-20
	Associated Fabrication Methods		
	15-Apr-02 Electrostatically Controlled Variable Capacitor	MCNC	Expires: 25-Apr-20
++	18-Mar-02 Miniature Electrical Relays Using a Piezoelectric Thin Film as	MCNC	Expires: 30-Oct-20
1	an Actuating Element		
	24-Sep-02 Microelectromechanical Elevating Structures	MCNC	Expires: 27-Jul-20
6,492,781   10-Dec-02  Closed-1	10-Dec-02  Closed-Loop Cold Cathode Current Regulator	MCNC	Expires: 25-Apr-20
6,485,273   26-Nov-02   Distribu	26-Nov-02 Distributed MEMS Electrostatic Pumping Devices	MCNC	Expires: 01-Sep-20
6,520,649 18-Feb-03 Image P	18-Feb-03 Image Projection Device and Associated Method	MCNC	Expires: 07-Jan-22

B. Pending U.S. Applications Assigned to MCNC as Sole Owner.

Series	Allowed 12/4/02; Issue Fee Due 3/4/03	RCE Application and Amendment in response	to 8/29/02 Final Rejection Filed 1/29/03; Application pending.	Application pending.	Application pending.	Application pending.		Application pending.	Application pending.	Application pending.	Application pending.		Issue Fee/Publication Fee Pd. 1/29/03; Awaiting Issue Notification	Application pending		Application pending.	Application pending.		Application pending.		Application pending.	Application pending.
Avsignee	MCNC	MCNC		MCNC	MCNC	MCNC		MCNC	MCNC	MCNC	MCNC		MCNC	MCNC		MCNC	MCNC		MCNC		MCNC	MCNC
OSANDS Serial(Nov )对IIIngilbate	15-May-00 Method for Fabricating a Microelectromechanical Bearing	etromechanical Flexible Membran	Methods	Scanning Apparatus and Associated Methods	Gigabyte Memory Module System	Tunable Microwave Component Using Composite	Dielectrics with Both Ferroelectric and Ferromagnetic Properties	Micromachined Chopper Device for Infrared Detectors	An Electro-Magnetic Field Sensor	Intrusion Tolerant Server System	User-Executable Method for Complex Model Data	Analysis and Associated System, Computer Device, and Computer Software Program Product	High Sensitivity Polarized Light Discriminator Device	Miniature Electrical Relays Using a Piezoelectric Thin	Film as an Actuating Element and Methods of			Measurements	Intrusion Tolerant Communication Networks and	Associated Methods	Multi-Layer Flexible Circuit with Embedded Optic	Tunneling Transistor
i Hiffiginade	15-May-00	14-Sep-00		12-Oct-00	29-Nov-00	04-Apr-01		13-Apr-01	26-Apr-01	11-Jun-01	11-Jan-02		23-Oct-01	16-Jan-02		06-May-02	31-May-02	•	11-Jun-02	·	12-Jun-02	28-Jun-02
TOS Aprix Serbition	09/570,628	266,199/60		09/689,557	09/726,155	09/826,548		09/834,825	09/842,834	09/878,824	10/044,316		10/045,356	10/053,439		10/139,527	10/160,992		10/166,921		10/170,714	10/185,338

	Application pending.	Application pending.	Application pending.	Application pending.
Assignitee	MCNC	MCNC	MCNC	MCNC
USANDA Sepalino Johnsudate	10/184,345 27-Jun-02 Electrostatic Color Display	10/227,089 23-Aug-02 Through-Via Vertical Interconnects, Through-Via Heat Sinks and Associated Fabrication Methods	10/268,424 10-Oct-02 Optical-Inclusive dWDM Local Area Network	10/334,985 31-Dec-02 Design for Dielectric and Metallic Plurality of Elements

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. Patents and Applications Jointly Owned by MCNC

Notes:	Expires: 01-Sep-04	Expired: 30-Jan-94	Expired: 19-May-00	Expires 25-Aug-09		Expired: 28-Jun-02	Duke University Expires: 14-Apr-14	Expires: 31-Dec-12	Expires: 10-Jun-14	Expires: 05-Nov-11	Expires: 16-Dec-16		Expires: 30-Nov-18	
Jointtowner	UNCC	BOC	UNCC	Northern	Telecom	IBM	Duke University	ONCC	ONCC	ONCC	Boeing		NC State	
USIParent lissuelDatent — Desembion	01-Sep-87 Silver Methenamine Staining Method	30-Jan-90 Metallization Process for an Integrated Circuit	19-May-92 Photoresists resistant to Oxygen Plasmas	27-Aug-91 Method and Apparatus for High Precision Weighted Random Pattern	Generation	28-Jun-94 High Performance Integrated Circuit Chip Package	12-Sep-95 Method of Forming Metal-Disilicide Layers and Contacts	26-Dec-95 Pleated Sheet Microelectromechanical Transducer	10-Jun-97 Microelectronic Module Having Optical and Electrical Interconnects	13-Jul-99 Microelectronic Module Having Optical and Electrical Interconnects	26-Sep-00 Fiber Optic Connector Having a Microelectromechanical Positioning	Apparatus and an Associated Fabrication Method	Methods of Raising Reflow Temperature of Glass Alloys by Thermal	Treatment in Steam, and Microelectronic Structures Formed Thereby
ussuelDafe	01-Sep-87	30-Jan-90	19-May-92	27-Aug-91		28-Jun-94	12-Sep-95	26-Dec-95	10-Jun-97	13-Jul-99	26-Sep-00		7-Aug-01	
USIPatent f No	4,690,901*	4,897,287	5,114,827	5,043,988		5,325,265	5,449,642*	5,479,061	5,638,469	5,923,796	6,124,663*		6,271,150*	

### **F...**

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### PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT (this "Assignment"), dated as of the 11<sup>th</sup> day of March, 2005, is made by and between MCNC RESEARCH & DEVELOPMENT INSTITUTE, a North Carolina nonprofit corporation ("Seller"), to RESEARCH TRIANGLE INSTITUTE, a North Carolina nonprofit corporation ("Buyer").

### Statement of Purpose

Seller and Buyer are parties to that certain Asset Purchase Agreement, dated as of February 8, 2005, (the "Purchase Agreement") providing, among other things, for the assignment by Seller to Buyer of all of Seller's right, title and interest in and to the Intellectual Property Assets (as such term is defined in the Purchase Agreement). The parties hereto desire to provide for the assignment of such right, title and interest in and to certain patents in accordance with the terms of the Purchase Agreement.

Now, THEREFORE, in consideration of the premises and other good and valuable consideration, the parties intending to be legally bound agree as follows:

- 1. Patent Ownership. Seller represents that it is the owner of the patents and patent applications set forth on Schedule 1 hereto and hereby made a part hereof (the "Patent Rights"):
- 2. Patent Assignment. Seller does hereby sell, assign and transfer unto Buyer, its successors, assigns and legal representatives, the entire right, title and interest in all the Patent Rights, the inventions described and claimed therein, including any applications or provisional applications now or hereafter filed in any jurisdiction worldwide, including any reissues, divisionals, continuations, continuations-in-part, extensions or foreign counterparts of the Patent Rights heretofore or hereafter granted, any and all letters patent which may be granted therefor, together with all claims for damages in any applicable jurisdiction by reason of past, present, or future infringement thereof, with the right to sue for, and collect the same for its own use and enjoyment, the same to be held and enjoyed by Buyer for its own use, and the use of Buyer's successors and assigns, as fully and entirely as the same would have been held and enjoyed by Seller if this Assignment had not been made. At Buyer's request and expense, Seller agrees further to cooperate with Buyer in any suit or process for dispute resolution, based on claims the Patent Rights assigned herein have been infringed.
- 3. <u>Cooperation</u>. At Buyer's request and expense, Seller covenants that it will cooperate with Buyer in perfecting any interests in the Patent Rights. To carry out in good faith the intent and purpose of this Assignment and to facilitate prosecution and enforcement of the Patent Rights in all countries in the world, the Seller will execute, and shall use its best efforts to have inventors execute when needed, all appropriate oaths, declarations, assignments, powers of attorney and other documents.

[Signatures appear on the following page.]

IN WITNESS WHEREOF, Seller has caused this PATENT ASSIGNMENT to be executed and delivered by its duly authorized representative as of the date first set forth above.

### MCNC RESEARCH & DEVELOPMENT INSTITUTE

By:

Name: John W. Cambier

Tide: Treasurer

County of Durham
State of North Carolina

On this 11<sup>th</sup> day of March, 2005, personally appeared before me, John W. Cambier, to me known and known to me to be the person aforesaid, who duly acknowledged the signing of the foregoing instrument to be his voluntary act and deed, and as Treasurer (title) of MCNC Research & Development Institute did execute the same for the uses and purposes therein set forth.

(Seal)

· • SCHEDULE 1

Patent Rights

40111879.2 00667031

Patent Assignment - Schedule 1 MCNC-RDI ACTIVE U.S. CASES

Title	COMMUNICATION SYSTEM WITH ADAPTIVE CHANNEL CORRECTION		_	SCANNING APPARATUS AND ASSOCIATED METHOD	LOW POWER TUNNELING METAL-OXIDE SEMICONDUCTOR (MOS) DEVICE	•	I IMPEDANCE CONTROL DEVICES FOR USE IN THE TRANSITION REGIONS OF ELECTROMAGNETIC AND OPTICAL CIRCUITRY AND METHODS FOR USING THE SAME	VISUAL DISPLAY WITH INCREASED FIELD OF VIEW	FLEXIBLE OPTOELECTRONIC CIRCUIT AND ASSOCIATED METHOD	I SAMPLE ANALYSIS DEVICE HAVING A EUCENTRIC GONIOMETER AND ASSOCIATED METHOD	-		METHOD AND APPARATUS FOR HIGH PRECISION WEIGHTED RANDOM PATTERN GENERATION	FLUXLESS SOLDERING PROCESS		• –	OPTICAL-INCLUSIVE DWDM LOCAL AREA NETWORK	MINIATURE ELECTRICAL RELAYS USING A PIEZOELECTRIC THIN FILM AS AN ACTUATING	AICROELECTROMECHANICAL ELEVATING STRUCTURES	CLOSED-LOOP COLD CATHODE CURRENT REGULATOR	HYBRID MICROELECTROMECHANICAL SYSTEM TUNABLE CAPACITOR AND ASSOCIATED						I THIN FILM FERROELECTRIC FLAT PANEL DISPLAY DEVICES, AND METHODS FOR OPERALING AND FABRICATING SAME	•			
Date Status	Pending	- Published	Published	1/20/2004 Granted	9/9/2003 Granted	Published	Published	Pending	7/13/2004 Granted	Published	Published	Published	8/27/1991 Granted	5/1/1990 · Granted	Published	Published	Pending	3/19/2002 Granted	9/24/2002. Granted	5/21/2002 Granted	4/23/2002 Granted	7/1/2003 Granted	2/18/2003 Granted	4/8/2003 Granted	12/10/2002 Granted	7/18/1995 Granted	9/26/1995 Granted	4/18/1995 Granted	4/14/1999 Granted	7/15/2003 Granted	4/16/2002 Granted
Issue Date	٦.						•																		•						
Pat. No.			•	6680788	6617643				6763158			_	8/25/1989 5043988	3/15/1989 4921157	~	~	7	11/23/1999 6359374	7/25/2000 6458420	4/25/2000 6392355	10/23/2000 6377438	4/13/2001 6586738	12 6520649	11 6545329	2 6492781	M 5434464	5453661	33 5407121	35 5740258	1 6593833	12/15/1999 6373682
Filing IDate	5/12/2003	6/27/2002	6/11/2001	10/12/2000 6680788	6/28/2002 6617643	12/31/2002	12/17/2002	5/13/2003	6/12/2002	5/31/2002	1/11/2002	5/29/2003	8/25/198	3/15/198	6/11/2002	8/23/2002	10/10/2002	11/23/199	7/25/200	. 4/25/200	10/23/200	4/13/200	1/7/2002	10/23/2001	2/14/2002	5/23/1994	4/15/1994	11/19/1993	8/5/1996	4/4/2001	
App. No.	10/435,047	10/184,345	09/878,824	09/689,557	10/185,338	10/334,985	10/321,348	10/437,091	10/170,714	10/160,992	10/044,316	10/447,620	07/398,772	07/324,247	10/166,921	10/227,089	10/268,424	09/448,080	09/626,725	09/557,533	09/694.835	09/834,825	10/041,861	10/045,356	10/076,186	08/247,562	08/228,116	08/155,020	08/461,001	09/826,548	09/464,010
Matter No.	1100	0012	0013	0015	0016	0017	. 9100	0019	0020	0023		0028	0029	0030	0042	0043	0044	0020	0051	0052	0053	0054	0055	0056	0057	0058	6500	0000	0062	0083	9900
Family No	7	088625-0012 00	066625-0013 O	.066625-0015 0		066625-0017 0		088625-0019 0				066625-0054 (	066825-0029	066625-0030	066625-0042	066625-0043	066625-0044		066625-0051		066625-0053	086625-0054	068625-0055	066625-0058	066625-0052	086625-0058	066625-0059	. 066625-0080	066625-0062	066625-0063	066625-0088

3/11/2005

# ACNC-RDI ACTIVE U.S. CASES

	)																			•								
Title	ELECTROSTATICALLY ACTUATED ELECTROMAGNETIC RADIATOR SHUTTER	MICROMACHINED ELECTROSTATIC ACTUATOR WITH AIR GAP	MODULATABLE REFLECTORS AND METHODS FOR USING SAME	MICROELECTROMECHANICAL FLEXIBLE MEMBRANE ELECTROSTATIC VALVE DEVICE AND RELATED FABRICATION METHODS	MODULATABLE REFLECTORS AND METHODS FOR USING SAME	PLEATED SHEET MICROELECTROMECHANICAL TRANSDUCER	MICROELECTRONIC MODULE HAVING OPTICAL AND ELECTRICAL INTERCONNECTS	FLUORINATED FLUXLESS SOLDERING	FLUORINATED FLUXLESS SOLDERING	FABRICATION METHOD FOR MICROELECTROMECHANICAL TRANSDUCER	MICROELECTROMECHANICAL TRANSDUCER AND FABRICATION METHOD	ENCAPSULATED MICRO-RELAY MODULES AND METHODS OF FABRICATING SAME	TACKING PROCESSES AND SYSTEMS FOR SOLDERING	HIGH VOLTAGE MICROMACHINED ELECTROSTATIC SWITCH	DISTRIBUTED MEMS ELECTROSTATIC PUMPING DEVICES	ARC RESISTANT HIGH VOLTAGE MICROMACHINED ELECTROSTATIC SWITCH	MICROELECTRONIC RADIATION DETECTORS FOR DETECTING AND EMITTING RADIATION SIGNALS	OVERDRIVE STRUCTURES FOR FLEXIBLE ELECTROSTATIC SWITCH	MINIATURE ELECTRICAL RELAYS USING A PIEZOELECTRIC THIN FILM AS AN ACTUATING ELEMENT	THROUGH-VIA VERTICAL INTERCONNECTS, THROUGH-VIA HEAT SINKS AND ASSOCIATED FABRICATION METHODS	HIGHER OPERATING VOLTAGES FOR FLEXIBLE FILM ACTUATORS	FLOW CONTROL FOR HIGHER OPERATING PRESSURES	IMPROVED RELEASING STRUCTURES	ELECTROSTATIC VALVE WITH NON-WETTING LAYER	STRONG AND FLEXIBLE VALVE CLOSING FOR FLEXIBLE ELECTROSTATIC FILM ACTUATOR	OPTICAL BURST SWITCH LOCAL AREA NETWORK COMPONENT ARCHITECTURE	THREE DIMENSIONAL MULTIMODE AND OPTICAL COUPLING DEVICE	UNIFIED ARCHITECHTURE FOR IMPLEMENTING JIT, JET & HORIZON
Issue Date   Status	5/28/2002 Granted	5/22/2001 Granted	10/24/2000 Granted	7/8/2003 Granted	5/15/2001 Granted	12/26/1995 Granted	8/17/1993 Granted	4/1/1997 Granted	1/11/2000 Granted	3/1/1994 Granted	4/27/1993 Granted	2/15/2000 Granted	11/30/1999 Granted	5/8/2001 Granted	11/26/2002 Granted	5/2/2000 Granted	.11/23/1999 Granted	5/4/2004 Granted	3/2/2004 Granted	Pending	Panding	Pending	Pending	Pending	Pending	Pending	Pending	Pending
Filing IDate   Pat. No.	10/30/2000 6396620	5/27/1989 6236491	3/17/1998 6137623	9/14/2000 8590267	8/10/2000 6233088	12/31/1992 5479061	11/5/1991 5237434	5/12/1895 5615825	9/15/1997 6013381	12/17/1992 5290400	11/27/1990 5206557	8/5/1996 8025767	10/2/1996 5992729	6/30/1999 6229683	9/1/2000 6485273	6/30/1999 6057520	9/29/1997 5990472	5/6/2002 6731492	1/16/2002 6700309	4/29/2004	4/23/2004	4/23/2004	4/23/2004	4723/2004	4/23/2004	5/20/2004	71712004	5/27/2004
App. No.	09/702,082	.09/320,891	09/042,836	,09/661,997	09/636,141	07/899,161	107/787,938	08/439,591	08/929,429	07/992,528	.07/819,183	08/892,502	08/724,910	.09/345,722	09/654,446	08/345,300	08/840,000	10/139,527	10/053,439	10/834,224	60/564,571	.60/564,573	60/564,594	60/564,580	60/564,572	10/849,204	10/884,963	60/574,588
Matter No.	7800	9900	6900	0000	1,200	. \$200	. 8200	6200	080	0081	0082	<b>308</b>	0085	9800	7800	0088	0600	. 0097	6600	.0127	0131	0132	0133	0134	0135	0136	0140	0142
Family No.	086625-0087	068625-0068	066625-0069	066625-0070	066625-0069	066625-0075	066625-0078	068625-0079	086625-0080	066625-0081	066625-0082	066825-0084	068625-0085	066625-0086	066625-0087	066625-0088	086825-0090	066625-0049	086625-0050	066625-0043	066625-0131	066625-0132	066625-0133	066625-0134	066625-0135	066625-0025	066625-0017	066625-0142

## Patent Aßsignment - Schedule 1

# , ROL MCNC FOREIGN APPLICATIONS STATUS REPORT

Ciliani         Martine         Culturi         Truch (1997)         Truch (1997) <t< th=""><th>•</th><th></th><th></th><th></th><th></th><th></th></t<>	•					
0032 SRT-377 JP 0034 SRT-377 CA 0034 SRT-387 A28,435 CA 0039 SRT-387,428,435 CA 0040 SRT-387,428,435 KR 0041 SRT-387 EP 0042 SRT-364 JP 0048 SRT-354 JP 0072 SRT-354 JP 0072 SRT-354 CA 0099 SRT-354 CA 0099 SRT-016 CA 0090 SRT-021 CA	こうか こうしょう かんかん かんじゅう 大きな	Antibastan MA	Cutan Pake			
0034 SRT-377 CA 0034 SRT-377 SG 0035 SRT-384 JP 0037 SRT-387,428,435 CA 0039 SRT-387,428,435 KR 0041 SRT-387 EP 0048 SRT-354 JP 0048 SRT-354 JP 0072 SRT-354 JP 0072 SRT-354 CA 0099 SRT-021 CA 0090 SRT-021 CA	ICAL FLEXIBLE MEMBRANE ELECTROSTATIC VALVE BRICATION METHODS	2002-528693 9/14/2001	9/14/2001	Parent No.	Parent No. Insue Date	Published
0034 SRT-377 SG 0035 SRT-387,428,435 CA 0039 SRT-387,428,435 CA 0040 SRT-387,428,435 KR 0041 SRT-387 EP 0048 SRT-354 JP 0048 SRT-354 JP 0072 SRT-354 TW 0099 SRT-354 CA 0099 SRT-016 CA 0090 SRT-021 CA 0090 SRT-021 CA	LE MEMBRANE ELECTROSTATIC VALVE	2421934	9/14/2001			Pending
0035 SRT-384 JP 0038 SRT-387,428,435 CA 0038 SRT-387,428,435 JP 0040 SRT-387,428,435 KR 0041 SRT-377 EP 0048 SRT-354 JP 0048 SRT-354 JP 0072 SRT-354 JP 0072 SRT-354 CA 0099 SRT-016 CA 0090 SRT-016 CA	ANE ELECTROSTATIC VALVE	200301230-9	9/14/2001	•	٠	Pending
0037 SRT-387,428,435 CA 0039 SRT-387,428,435 JP 0040 SRT-387,428,435 KR 0041 SRT-377 EP 0048 SRT-498 & SRT-560 WO 0072 SRT-354 JP 0072 SRT-354 TW 0099 SRT-354 CA 0099 SRT-016 CA						
0039 SRT-387,428,435 JP 0040 SRT-387,428,435 KR 0041 SRT-377 EP 0048 SRT-498 & SRT-560 WO 0048 SRT-337 JP 0072 SRT-337 JP 0072 SRT-337 CA 0099 SRT-016 CA 0090 SRT-016 CA		2001-537092	3/16/1999			Published
0040 SRT-387,428,435 KR 0041 SRT-498 & SRT-560 WO 0047 SRT-354 JP 0048 SRT-337 JP 0072 SRT-354 JP 0072 SRT-354 CA 0089 SRT-354 CA 0099 SRT-7016 CA 0090 SRT-021 CA	•	2368128	5/19/2000			Pending
0045       SRT-377       EP         0045       SRT-496 & SRT-560       WO         0048       SRT-354       JP         0072       SRT-387,428,435       SG         0089       SRT-354       TW         0091       SRT-016       CA         0092       SRT-021       CA         0093       SRT-009       CA		2000-000-000	5/19/2000			Published .
0045 SRT-496 & SRT-560 WO 0048 SRT-337 JP 0072 SRT-337 JP 0089 SRT-354 TW 0091 SRT-016 CA 0092 SRT-021 CA	LE MEMBRÄNE ELECTROSTATIC VALVE METHODS	201-/013885 01970902.1	9/14/2001	••		Pending Published
0047 SRT-354 JP 0048 SRT-337 JP 0072 SRT-387,428,435 SG 0089 SRT-354 TW 0091 SRT-016 CA 0092 SRT-021 CA 0093 SRT-009 CA	ECTS, THROUGH-VIA HEAT SINKS AND	US02/027013	8/23/2002		•	Published
0048 SRT-337 JP 0072 SRT-387,428,435 SG 0089 SRT-354 TW 0091 SRT-016 CA 0092 SRT-021 CA	COMPCHINE SI ECTEDOSTATION CAMPA	. 407004 4004				
0072 SRT-387,428,435 SG 0089 SRT-354 TW 0091 SRT-016 CA 0092 SRT-021 CA 0093 SRT-009 CA		2001-200409	3/4/2000		:	Pending
0089 SRI-354 TW 0091 SRI-016 CA 0092 SRI-021 CA 0093 SRI-009 CA	Q	2001-300303 300406467	00000000	77770		Published
0091 SRT-016 CA 0092 SRT-021 CA 0093 SRT-009 CA	TATIC SWITCH	200100137-1 20100155	313/2000	04717	116/2002	Granled
0092 SRT-021 CA	RING	519,098	9/25/1986	NI-138410 . 1250372	-	Granted
0093 SRT-009 CA	METHOD AND APPARATUS FOR EXPOSING PHOTORESIST BY USING		R/13/108K	4226078		
CONNECTIONS THERETO	ELECTRICAL	519,089	9725/1986	1250373		Granted
ORI4 JP	S FOR HIGH PRECISION WEIGHTED RANDOM PATTERN	.512538/1990	8/24/1990	3037408	2/25/2000	Granted
086625 .0095 . DRT-4 CA METHOD AND APPARATUS FOR HIGH GENERATION	PRECISION WEIGHTED RANDOM PATTERN	2065341	8/24/1990	2065341	5/26/1998 Granted	Granted
066625 0096 DRT4 EP METHOD AND APPARATUS FOR HIGH GENERATION	PRECISION WEIGHTED RANDOM PATTERN	90913170.6	8/24/1990	0541537	7/27/1994 Granted	Granted
066625 0102 SRT-496 & SRT-560 JP THROUGH-WA VERTICAL INTERCONN ASSOCIATED FABRICATION METHOD	IECTS, THROUGH-VIA HEAT SINKS AND S	2003-523001	8/23/2002			Pending

Patent Assignment - Schedule 1

CHent.	Matter	CHent   Matter   Citent Reference   Country	County	971	Application No Filling-Date	Filing-Date	Patent No. Hasue Date	Issue Date	Status
066626 0103	1	SRI 496 & SRT-560 SG		THROUGH-VIA VERTICAL INTERCONNECTS, THROUGH-VIA HEAT SINKS AND ASSOCIATED FABRICATION METHODS	200400515-3	8/23/2002			Pending
066625 0105	0105	SRT-496 & SRT-560 IN	•	THROUGH-VIA VERTICAL INTERCONNECTS, THROUGH-VIA HEAT SINKS AND ASSOCIATED FABRICATION METHODS	299/DELNP/04 8/23/2002	8/23/2002		. —	Pending
066825 0106	9010	SR1.496 & SRT.560 KR	,	THROUGH-VIA VERTICAL INTERCONNECTS, THROUGH-VIA HEAT SINKS AND ASSOCIATED FABRICATION METHODS	10-04-7002596 8/23/2002	8/23/2002			Published
066625 0137	7610	SRİ 489	WO	ELECTROMAGNETIC RADIATION DETECTORS HAVING A MICROELECTROMECHANICAL SHUTTER DEVICE	US04/16318	.5/25/2004			Published
066625 066625 068825	0139 0141 0143	SRT-512, 553 & 571 SRT-563-PCT SRT-387,428,435	W WO	VISUAL DISPLAY WITH INCREASED FIELD OF VIEW OPTICAL BURST SWITCH LOCAL AREA NETWORK COMPONENT ARCHITECTURE MICROMACHINED ELECTROSTATIC ACTUATOR WITH AIR GAP	USO4/14945 USO4/15862 2004-129835	5/13/2004 5/20/2004 4/26/2004		٠.	Published Published

919-541-6001

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